
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Gerald R. Smith, Commodity Specialist

Telephone: (703) 648-4983, Fax: (703) 648-7757

E-mail: grsmith@usgs.gov

Richelle Gipe (Data), (703) 648-7961

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

LEAD IN JANUARY 1997

Mine production, based upon the net quantity recovered in the smelting of concentrate, increased by about 3% in January. Primary and secondary refinery production increased by about 13% and 3%, respectively, and total production of refined lead, primary plus secondary, rose by 5% in January. Reported consumption decreased by about 2%.

According to Platt's Metals Week published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price halted a 4-month decline, increasing by 0.1% and 0.5%, respectively, in January.

National Defense Stockpile cash disposal (sale) of lead in January 1997 was 2,135 metric tons (2,353 short tons). Sale of lead to date in fiscal year 1997 (October 1996 through January 1997) was 6,366 metric tons (7,017 short tons).

The Government of Kazakhstan announced that it will merge the lead-zinc primary smelter-refinery operations at Ust-Kamenogorsk, the smelter-refinery works and polymetal mining combine at Leninogorsk, and the mining and ore dressing combine at Zyryanovsk into one new company called AO Kaztsink. According to Kazakhstan's Ministry of Trade and Industry, the union of the three operations will include a program for extensive modernization and repair of the current facilities. Kazakhstan's total lead production was said to be about 88,000 tons in both 1995 and 1996. Lead production capacity at the Ust-Kamenogorsk smelter-refinery alone is reported to be over 100,000 tons annually. The newly-formed company will also hold mining rights in the Maleyevsk, Ridder-Sokol, and Tishinsk mineral deposits in eastern Kazakhstan.¹

Tunisia's Industry Ministry reportedly is seeking a foreign investor to reopen the Bougrine lead-zinc mine southwest of Tunis. The mine, first opened in mid-1994, was closed in October 1996 by Inmet Mining Corp., Toronto, Canada, a 48% shareholder in the venture, when zinc prices failed to meet the levels needed for profitable operation. According to a Ministry

spokesperson, in an effort to keep the mine operating, a proposal had been given to Inmet to relinquish its shares in the venture in return for a writedown of the mine's debt held by the Tunisian banks. In 1995, about 6,300 tons of lead in concentrate was produced at Bougrine. Approximately 3,000 tons was produced in 1996, prior to its closure. It is anticipated that production could resume almost immediately at the mine, should an appropriate investor be found.²

China National Nonferrous Metals Co. has reported completion of a feasibility study and initiation of construction toward the mining of the zinc-lead deposit in Lanping County, western Yunnan Province. Ore reserves at Lanping total 14 million tons. Although the grades of the deposit were currently unavailable, it was said that Lanping was the largest zinc-lead deposit known in China. It was expected to take about 3 years to complete construction at the mine.³

In Australia, RTZ-CRA sold Century Zinc Ltd., the development vehicle for the Century zinc-lead mining project, Queensland, Australia, to Pasminco Ltd., Sydney, Australia. The purchase also included the rights to RTZ-CRA's Dugald River zinc-lead deposits in Queensland. CRA Ltd., Melbourne, Australia, and RTZ Corp. Plc, London, United Kingdom, a 49% shareholder in CRA Ltd., had merged in late 1995 to form the current RTZ-CRA. Demonstrated reserves at Century total 116 million tons grading 10.2% zinc and 2.3% lead. Current plans include the development of a mining operation capable of producing 780,000 tons of zinc concentrate and 84,000 tons of lead concentrate annually, but progress has been slowed because of an impasse in negotiations with local Aboriginal groups who claim ownership of the land under Australia's Native Title Act.⁴ Recently the Government of Queensland halted the renewal of all mining leases issued since 1994 as well as the approval of any new applications, until the Native Title issue is resolved. The Government's decision was made as a result of a ruling by

the High Court of Australia in December 1996, stating that the existence of a pastoral lease did not necessarily extinguish the indigenous population's ownership rights to that land.⁵

Anvil Range Mining Corp., Toronto, Canada, announced in late January that it had arranged for Cominco Ltd., Vancouver, Canada, to purchase 4 million of its common shares, representing a 28%-share in the company. Anvil Range owns and operates the Faro lead-zinc mine, Yukon Territory, Canada. Mining operations were suspended temporarily at Faro near the end of 1996 as a result of adverse market conditions and mine production below budgeted levels. Cominco, currently Anvil Range's exclusive marketing agent in Europe, reported that the purchase agreement was aimed at "providing long-term support to Anvil Range's concentrate customers in Europe," and "at this stage, [the company] had no view on the possible reopening of the Faro Mine."⁶

Western Metals, Perth, Australia, recently approved development of the Kapok deposit near its Cadjebut Mine in the Kimberly region of Western Australia. Mine production from the Kapok deposit was expected to begin in late April or early May 1997, but the timing and production level will be

dependent upon the reserve status of the Cadjebut Mine. Mine production at Kapok was intended to replace production at the Cadjebut Mine, as reserves at the latter mine became depleted.⁷ The recent discovery of additional reserves at Cadjebut, however, was expected to extend the life of the mine by as much as 4 years.⁸

⁵Mining Journal, London. Kazaks Combine Zinc-Lead Plants. V. 328, No. 8410, Jan. 3, 1997, p. 3.

²American Metal Market. Tunisia Seeking Foreign Investors. V. 105, No. 6, Jan. 9, 1997, p. 5.

³Mining Journal, London. Industry In Action; Development--Lanping Lead And Zinc. V. 328, No. 8411, Jan. 10, 1997, p. 21.

⁴_____. Sale Of The Century. V. 328, No. 8411, Jan. 10, 1997, p. 1.

⁵Metal Bulletin. Queensland Government Halts All New Mine Development. No. 8144, Jan. 13, 1997, p. 6.

⁶Platt's Metals Week. Cominco Buys Into Anvil Range. V. 68, No. 4, Jan. 27, 1997, p. 6.

⁷Mining Journal, London. Industry In Action; Development--Kapok Decision. V. 328, No. 8414, Jan. 31, 1997, p. 88.

⁸Metal Bulletin. Western Metals Increases Life Of Cadjebut Mine. No. 8109, Sept. 5, 1996, p. 5.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons)

	1995	1996			1997
	Year total	Jan.	Dec.	Jan. - Dec. p/	Jan.
Production:					
Mine (recoverable)	386,000	36,900	35,700	418,000	36,600
Primary refinery 2/	374,000	34,700	25,500	326,000	28,800
Secondary refinery:					
Reported by smelters/refineries	955,000	59,000	90,400	1,010,000	92,800
Estimated	--	15,400	1,550	16,100	1,620
Recovered from copper-base scrap e/	17,100	1,250	1,250	15,000	1,250
Total secondary	972,000	75,700	93,200	1,040,000	95,600
Stocks, end of period:					
Primary refineries 2/	XX	15,000	8,160	XX	8,460
Secondary smelters and consumers	XX	55,200	55,300	XX	49,800
Imports for consumption:					
Ore and concentrates (lead content)	2,590	128	707	6,570	NA
Refined metal	264,000	24,500	22,600	268,000	NA
Consumption:					
Reported	1,600,000	66,100	104,000	1,230,000	102,000
Undistributed e/	--	40,500	38,600 r/	454,000	37,700
Total	1,600,000	107,000	143,000 r/	1,680,000	140,000
Exports (lead content):					
Ore and concentrates	65,500	787	15,300	59,700	NA
Materials excluding scrap	57,200	5,070	6,170	102,000	NA
Ash and residues	8,040	833	605	19,400	NA
TEL/TML preparations, based on lead compounds	3,210	19	254	3,200	NA
Exports (gross weight): Scrap	105,000	--	7,980 3/	85,300 3/	NA
Platt's Metals Week North American producer price (cents per pound)	42.28	45.22	48.52	48.83	48.56

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Data from American Bureau of Metal Statistics, Inc. (ABMS).

3/ Includes only non-battery scrap data.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
1996:				
January	45.22	709.03	463.79	1.528771
October	49.04	741.48	467.42	1.586314
November	48.72	716.18	430.83	1.662311
December	48.52	688.38	413.70	1.663933
Year average	48.83	773.87	495.56	1.561616
1997:				
January	48.56	691.89	417.17	1.658514

Source: Platt's Metals Week.

TABLE 3
MINE PRODUCTION OF RECOVERABLE LEAD IN THE UNITED STATES 1/

(Metric tons)

	1996 p/			1997
	Year total	Jan.	Dec.	Jan.
Missouri 2/	387,000	34,200 r/	33,000	33,600
Other States 3/	30,800 r/	2,650 r/	2,630 r/	2,970
Total	418,000	36,900	35,700	36,600
Daily average 4/	1,140	1,190	1,150	1,180

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Alaska and Missouri combined to avoid disclosing company proprietary data.

3/ Includes Colorado, Idaho, Montana, and New York.

4/ Based on number of days in period without adjustment for Sundays or holidays.

TABLE 4
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JANUARY 1997 1/

(Metric tons, gross weight)

Item	Stocks Dec. 31, 1996	Net receipts	Consumption	Stocks Jan. 31, 1997
Battery-lead	39,300	112,000	109,000	42,200
Soft lead	W	W	W	W
Drosses and residues	1,070	3,920	3,890	1,100
Other 2/	1,120	3,730	3,550	1,300
Total	41,500	120,000	117,000	44,600
Percent change from preceding month	--	+9.8	+6.9	+7.6

W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 5
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE
SCRAP IN JANUARY 1997 1/

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	47,400	--	--
Remelt lead	W	W	W
Antimonial lead	39,900	11	W
Other 2/	W	W	--
Total lead-base	92,800	34	565

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to three significant digits.

2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 6
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

Uses	1995	1996			1997
	Year total	Jan.	Dec.	Jan.-Dec. p/	Jan.
Metal products:					
Ammunition-shot and bullets	70,900	4,680	2,880 r/	37,800 r/	3,960
Brass and bronze-billet and ingots	8,860	570	447	6,060	549
Cable covering-power and communication and cabling lead-building construction	6,580	620	593	6,720	648
Casting metals	18,100	113	43	1,400	42
Pipes, traps, and other extruded products	2,210	W	(2/)	(2/)	(2/)
Sheet lead	27,900	887	5,160	13,900	673
Solder	16,200	502	282	5,480	753
Storage batteries, including oxides	1,360,000	53,600	94,000	1,140,000	94,300
Terne metal, type metal, and other metal products 3/	11,700	674	134	3,830	198
Total metal products	1,520,000	61,600	104,000 r/	1,210,000	101,000
Other oxides	61,700	3,440	(4/)	(4/)	(4/)
Miscellaneous uses	21,900	1,010	827	13,600	879
Total reported	1,600,000	66,100	104,000	1,230,000	102,000
Undistributed consumption e/	--	40,500	38,600 r/	454,000	37,700
Grand total	1,600,000	107,000	143,000 r/	1,680,000	140,000

e/ Estimated. p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Terne metal, type metal, and other metal products."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Withheld to avoid disclosing company proprietary data; included with "Sheet lead."

3/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

4/ Withheld to avoid disclosing company proprietary data; included with "Miscellaneous uses including gasoline additives."

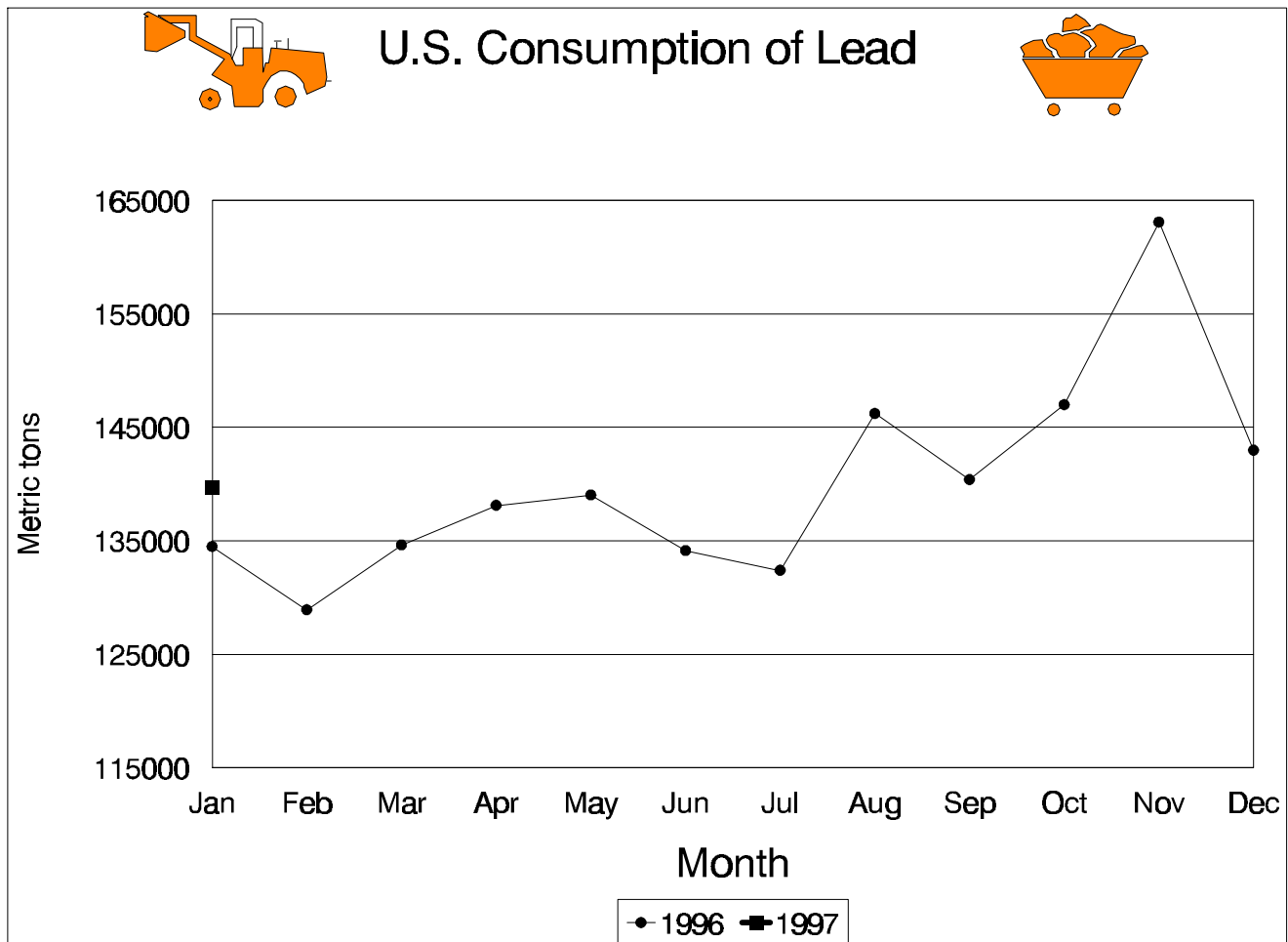


TABLE 7
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN JANUARY 1997 1/

(Metric tons, lead content)

Type of material	Stocks	Net	Consumption	Stocks
	Dec. 31, 1996	receipts		Jan. 31, 1997
Soft lead	19,800	51,700	53,500	18,100
Antimonial lead	31,400 r/	25,100	28,800	27,700
Lead alloys	W	19,300	19,300	W
Copper-base scrap	W	435	435	W
Total	55,300	96,500	102,000	49,800

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 8
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	1995	1996		
	Year total	Nov.	Dec.	Jan.-Dec.
Lead content:				
Ore and concentrates	65,500	383	15,300	59,700
Materials excluding scrap	57,200	6,760	6,170	102,000
Ash and residues	8,040	3,130	605	19,400
TEL/TML preparations, based on lead compounds	3,210	106	254	3,200
Total	134,000	10,400	22,300	184,000
Gross weight: Scrap	105,000	6,110 2/	7,980 2/	85,300 2/

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes only non-battery scrap data.

Source: Bureau of the Census.

TABLE 9
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

Country of origin	General imports				Imports for consumption			
	1995	1996		Year total	1995	1996		Year total
	Year total	Nov.	Dec.		Year total	Nov.	Dec.	
Ore, matte, etc.:								
Australia	1,480	--	--	--	--	--	--	--
Bolivia	759	5	4	326	--	--	--	--
Canada	106,000	23,700	25,000	352,000	--	--	148	4,370
Mexico	2,380	1	559	2,890	2,380	1	559	2,080
Peru	12,800	54	832	13,400	88	--	--	--
Other	984	--	--	133	126	--	--	122
Total	124,000	23,800	26,400	369,000	2,590	1	707	6,570
Base bullion:								
Mexico	31	--	--	5	31	--	--	5
Total	31	--	--	5	31	--	--	5
Pigs and bars:								
Belgium	25	--	--	11	25	--	--	11
Bulgaria	1,910	--	--	--	1,910	--	--	--
Canada	182,000	19,300	16,600	192,000	182,000	19,700	16,900	192,000
Germany	3,140	32	80	338	3,140	32	80	338
Mexico	54,300	4,470	4,700	56,900	54,300	4,470	4,700	56,900
Netherlands	42	--	--	--	42	--	--	--
Peru	22,100	800	700	17,100	22,100	800	700	17,100
Sweden	5	--	--	--	5	--	--	--
United Arab Emirates	210	--	31	160	210	--	31	160
United Kingdom	128	--	--	19	128	--	--	19
Venezuela	364	--	--	--	364	--	--	--
Other	242	--	159	846	242	--	159	846
Total	264,000	24,600	22,300	267,000	264,000	25,000	22,600	268,000
Reclaimed scrap, including ash and residues	75	--	--	192	75	--	--	192
Grand total	388,000	48,400	48,700	636,000	267,000	25,000	23,300	274,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.